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# Cross-Cultural and Social Tuning

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**Cross-Cultural and Social Tuning**

An Interactive Qualifying Project Report  
submitted to the Faculty of  
WORCESTER POLYTECHNIC INSTITUTE  
in partial fulfillment of the requirements for the  
Degree of Bachelor of Science

By

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Approved:

Professor Jeanine L. Skorinko, Project Advisor

## Abstract

This study aims at investigating the effects of culture on social tuning. 102 participants were recruited from a private New England university. Participants perceived the experimenter to either have egalitarian or no views and were primed to be either individualistic or collectivist. They then completed Implicit Associations Tasks, Explicit Attitudes and follow-up questionnaires. Results indicated, contrary to predictions, that those primed to be individualistic tuned more towards the experimenter and expressed more egalitarian attitudes than their collectivist counterparts.

## Cross-Cultural and Social Tuning

A variety of attitudes, values and norms have developed with the evolution of different cultures all over the world. Each culture gives a remarkably distinct understanding of attitudes that influence the conduct and cognition of each individual with respect to themselves or others (Kitayama & Markus, 1991). This results in a range of behaviors influenced by the level of collaboration, independence and assertiveness that is stressed upon by a culture's morals and values (Triandis, Bontempo, Villareal, Asai & Lucca, 1988). The experiment described in this report has been conducted in order to test this difference in attitudes, be it the tendency to be independent or interdependent, and observe its influence on the likelihood that an individual will align their own views with those of another person, most likely in the hopes of trying to establish or maintain a harmonious relationship with the person.

### *Culture and its influence*

The difference in the amount of independence or interdependence that is emphasized by various cultures gives rise to a dimension called as *collectivism versus individualism* (Triandis et al, 1988). Individualism generally stems from a culture or upbringing that emphasizes the concepts of independence and uniqueness (Hofstede, 2001). In this case, an individual's goals are oftentimes unrelated to those of their counterparts. This causes the individual to seek such events that are beneficial only to themselves, treating the accomplishments of others as immaterial (Johnson, Maruyama, Johnson, Nelson & Skon, 1981). Contrarily, collectivism arises from nurturing values of interdependence and abiding by social norms (Sivadas, Bruvold & Nelson, 2008). In such cases, individuals are likely to be required to suppress their personal goals in order to achieve more common goals, be it the goals of their family, teammates and so on (Triandis et al, 1988).

A study conducted on IBM employees in the years 1967 – 1973 provides further justification into the variance of individualistic versus collectivist attitudes across different cultures (Hofstede, 2001). This study was conducted in the hopes of better understanding the best way to improve interactions between individuals from different countries, particularly in the case of large corporations.

In this study, participants, who were mainly IBM employees from 40 different countries, went through a thorough interview process with follow-up questionnaires with as many as 135 coded questions, that would help determine whether they were more likely to showcase an individualistic or collectivist attitude (Hofstede et al, 1990). Questions ranged from testing whether individuals preferred large corporations as work environments, to whether they felt competition between employees was beneficial or not – with both these types of questions resulting in preferences relating to either group harmony and conformity (collectivism), or uniqueness and exclusivity (individualism).

Based on the results from this study, it was noted that the countries that tended to exhibit a greater individualistic nature were predominantly western countries, while those that exhibited a greater collectivist nature were mainly eastern countries (Hofstede, 2001). This measurement was done based on an “Individualism Index”, where greater the index meant greater the individualistic attitudes. Therefore, highly individualistic countries include the United States, Australia, etc. while countries that exhibit strong collectivism include China, Korea, etc. (Adler, Brahm & Graham, 1992).

Another instance that examines the consequence of culture on the attitudes of individuals dealt with testing the concepts of “Deviance or Uniqueness, Harmony or Conformity” (Kim & Markus, 1999, pp.785). It tests the idea that uniqueness is generally accepted as a beneficial attribute in American cultures, while conformity and group harmony is endorsed in Asian or Eastern cultures (Kim & Markus, 1999).

In this study, participants were shown a set of five pens. Of these five pens, four of them were similar in color (e.g., orange) and one of them was different (e.g., the lone green pen). Similarly, another combination consisted of three pens of one color (e.g., orange) and two pens of another color (e.g., green). It was observed that Americans had a greater tendency to pick the unique or minority pen, while Asians tended to avoid the unusual or uncommon pen. Therefore, in the case of one green and four orange pens, Americans tended to pick the green (or unique) pen, while Asians were more likely to pick the orange (or common) pen. Similarly, in the case of three orange and two green pens, Americans tended to pick the green pen while Asians were more likely to pick the orange (or more common) pen. Therefore, by choosing the unique pen, Americans illustrated individual preferences and distinctiveness (Kim & Markus, 1999), indicating individualistic attitudes. Similarly, by choosing the common pen, Asians demonstrated their aversion to uniqueness and exclusivity, implying collectivist attitudes.

Additionally, studies have shown that Asian Americans have a greater tendency to depict self-descriptions adapted to their relationships with others, while European Americans tend to describe themselves as separate, independent entities (English & Chen, 2007).

Thus, studies show that those from western cultures typically display more individualistic characteristics; whereas, those from eastern cultures typically display more collectivist characteristics and are more concerned with group harmony.

Past research also shows that priming individuals from western cultures with either individualistic or collectivist mindset primes mimics the results obtained when comparing participants from Western and Eastern cultures (Oyserman, Sorenson, Reber & Chen, 2009). A prime is generally a process that occurs outside of the conscious mind, which causes an individual to transfer the stimulus from a previous experience to an ensuing task (Oyserman

et al, 2009). Therefore, by priming an individual to be either collectivist or individualistic, the characteristics of the two attitudes can be investigated by allowing the individual to perform a variety of subsequent tasks.

### *Social Tuning*

In order to further understand the concepts of group harmony and conformity versus individuality and uniqueness, one must take into consideration the idea of a “shared reality” (Higgins & Hardin, 1996). According to Shared Reality theory, people feel a need to get along with another person and “share reality”, which could potentially lead to the establishment of an interpersonal relationship. The process of sharing reality may increase the likelihood that they will tune towards that person to develop a mutual understanding (Sinclair, Hutsinger, Skorinko & Hardin, 2005). In other words, individuals may alter their attitudes and mannerisms to be in alignment with the interaction partner’s attitudes and mannerisms in order to develop a sense of shared reality or mutual understanding (Sinclair et al, 2005). Research investigating the social tuning hypothesis has identified two key factors that influence the extent to which an individual engages in social tuning-- affiliative and epistemic motivation (Lun, Sinclair & Whitchurch, 2007; Sinclair et al, 2005). More specifically, for affiliative motivation, when individuals experienced a heightened desire to get along or “affiliate” with another person or group of persons (affiliative motivation), they are more likely to tune towards their interaction partner than those without affiliative motivation (Sinclair et al, 2005).

Epistemic motivation, on the other hand, is the desire individuals feel to obtain information, which enables them to make informed decisions when interacting with others (Lun et al, 2007). Therefore, an individual is more likely to evaluate and hypothesize their interaction partner’s views in order to make an informed decision as to what sort of “answer”

or response is best suited in order to maintain a harmonious relationship with the interaction partner (Boyle, 1993).

### *Current Research*

The current research seeks to expand on the past research on social tuning by investigating the extent to which cultural differences influence social tuning. The past findings on social tuning are limited because they have only been explored in a Western context. Therefore, it is unclear whether those from a collectivist culture will be more or less likely to tune.

Additionally, past research consistently shows that those hailing from eastern cultures exhibit collectivist mindsets to a greater degree and are more group-oriented (Hofstede, 2001). Therefore, it seems likely that this group-oriented mindset may encourage social tuning, in order to maintain group harmony.

Given these findings, the current research will adapt the previously mentioned priming technique, and will examine whether those primed with an individualistic or collectivist mindset are more likely to align their views with the subtly expressed views of their experimenter (e.g., the experimenter will wear a tshirt with an egalitarian message on it). It is predicted that those individuals primed to be collectivist should have a greater tendency to align their views with the experimenter as compared to those primed to be individualistic.

## Method

### *Participants*

A total of 102 undergraduate students (47 females, 54 males, 1 unreported) from a private New England university participated in this experiment. All participants were given



an informed consent, and were also given class credit for participating in the study. No further incentives were given.

### *Design*

The study utilized a 2 (Perceived Views: Egalitarian vs. No View) x 2 (Mindset Prime: Individualistic vs. Collectivist) between-participants design and examined how collectivist or individualistic attitudes influenced social tuning. To examine the effect of perceived views on social tuning, the experimenter wore either a plain tshirt (expressing no views) or an egalitarian message tshirt (“People don’t discriminate, they learn it”). In order to manipulate the mindset of the participants, the participants performed a pronoun circling task (adapted from Oyserman et al., 2009), that contained a story with either all pronouns in plural form (i.e., we) to prime collectivist mindset, or all singular form pronouns (i.e., I) to prime individualistic mindset.

To measure social tuning, participants completed implicit and explicit measures to test their attitudes towards homosexuals and Blacks. To measure implicit associations, two Implicit Associations Tests (IAT) were used (Greenwald, Banaji & Nosek, 2005; Nosek, Banaji & Greenwald, 2006)—one for Blacks and one for homosexuals. To measure explicit attitudes, validated attitude scales were used, including the Pro-Anti Black Scale (Katz & Hass, 1988) and the Attitudes towards Gay and Lesbians Scale (Herek G.M., 1988)

### *Materials*

*Script.* The experimenters were assigned a script that would allow them to follow certain procedures while conducting the experiment. This script included instructions on how to prepare for the experiment, the generic dialogue to follow while speaking to the participant and the introduction and debriefing required. The participant was also informed that this

script was being used in order to ensure that every participant received the same information (See Appendix A for script).

*Perceived Views Manipulation.* In order to manipulate the experimenter's perceived views, the experimenter wore one out of two different t-shirts. In the control condition, the experimenter wore a plain t-shirt. In the Egalitarian views condition, the experimenter wore a t-shirt that had the message "People don't discriminate. They learn it" printed on the front (see Appendix B for image of egalitarian shirt).

*Mindset Prime.* To manipulate collectivist or individualistic mindsets, the mindset prime task used in Oyserman et al, 2009, was utilized. In this task, participants read two short scenarios and had to circle all the pronouns in each scenario. One scenario was about a day in the city and the other was about enjoying the sunset at home. Half the participants were primed with an individualistic mindset because all the pronouns in the scenarios were singular (e.g., I), and half the participants were primed with a collectivist mindset because all the pronouns were plural (e.g., "we").

*Implicit Measure.* In order to measure implicit attitudes, two Implicit Associations Tests (IAT) were used (Greenwald et al, 2005; Nosek et al, 2006). The first IAT dealt with attitudes towards Blacks, and the other dealt with attitudes towards homosexuals. In this task, participants saw two different words, one on the left hand side of the computer screen and one on the right hand side. The participant then categorized the words or pictures that were flashed in the middle of the screen, into one of the two words that were shown at the top of the screen, by clicking the "d" key for the word on the left hand side, and the "k" key for the one on the right hand side.

In order to help the participants become familiar with this test, they were first given a practice session. After the practice rounds, participants were given the actual task. For

example, the words “good” and “bad” would be shown on the top left and right hand sides of the screen respectively. The “d” key would correspond to the word “good”, while the “k” key would correspond to the word “bad”. The participant would then be flashed words such as “vomit”, “joy” and so on, and were required to accordingly place these words into the “good” or “bad” categories. Once this round passed, participants learned the categorization task changed such that “Black” and “White” were displayed on the top of the screen, instead of the words “good” and “bad”. The participants were shown pictures of Black or White individuals, and were asked to categorize these using the “d” and “k” keys once again. After this round, participants learned that the categorization task would include both good/bad and Black/White categories in a category grouping, e.g., “White or Good” and “Black or Bad”, on the top left and right hand sides respectively of the computer screen. The words and pictures would then be flashed in an alternating manner, and the participant was to categorize these pictures or words once again as they would fit into the “White”, “Black”, “good” or “bad” categories. After this round was complete, the positions of the words were then switched, i.e., “good” would be shown on the right hand side and “bad” would be shown on the left hand side. The categorization task was then repeated once for good/bad, once for White/Black, and once for the combined grouping, e.g., “Black or Good” and “White and Bad”. Similarly, the second IAT had the participants performing the same actions on the words “heterosexual”, “homosexual”, “pleasant” and “unpleasant”. The ordering of the pairings (e.g., Black/Good, Black/Bad, White/Good, and White/Bad) was counterbalanced for each participant to avoid order effects.

The reaction times to complete the categorizations (or associations) were used to represent how strongly the participant’s views are based on the answer that they submitted. Faster reaction times indicate that an association resonates more in the participants mind.

*Explicit Measure.* Explicit attitudes towards homosexuals and Blacks were also measured. To measure attitudes towards homosexuals, the Attitudes towards Gays and Lesbians Scale (Herek, 1988) was used. This scale consisted of 16 questions and uses a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). For example, the participant would be shown a sentence such as “Lesbians are sick”, and were asked as to what extent they believed in that statement. To measure attitudes towards Blacks, the Pro-Anti Black Scale (Katz & Hass, 1988) was used. This scale consisted of 14 questions that measure pro-Black and anti-Black attitudes on a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree). For example, “Blacks don't seem to use opportunities to own and operate little shops and businesses” would be displayed, and the participant’s views asked in a similar manner (See Appendix C for questionnaire).

*Follow-up Questionnaire.* To provide manipulation checks, a follow-up questionnaire measured the extent to which the participants wanted to affiliate with the experimenter, the views they believed the experimenter held, and the extent to which they adjusted their views towards the experimenter’s views. These questions were on a 7-point Likert-type scale (1 = not at all; 7 = very much). In addition, the participants provided demographic information, such as gender, place of birth and sexual orientation. An option of “Do not wish to disclose” was provided for the sexual orientation field. (See Appendix D for this questionnaire)

### *Procedure*

After giving informed consent, participants were informed that the study investigated cognitive skills. In order to ensure that participants saw the message on the experimenter’s tshirt, all participants learned they needed to complete a “vision” test prior to using the computers. To do this, the experimenter looked for the vision chart and feigned that it was missing from the lab. In an attempt to still test their vision, the experimenter asked, in an

impromptu fashion, to either read the print that was on the tshirt (if they were in the egalitarian message condition) or a paper which had random letters written on it (in the plain tshirt condition)

After completing the ostensible vision test, participants completed a short cognitive task that was actually the mindset prime. In this task, participants read a story and had to circle the pronouns in the story. Participants were randomly assigned to either the Individualistic mindset prime (i.e. circled singular pronouns, such as “I”), or the Collectivist mindset prime (i.e., circled plural pronouns, such as “we”). Following the completion of the priming task, the participant completed the IATs. The order in which the IATs were presented was counterbalanced to prevent any order effects. Similarly, the order of the explicit measures was also counterbalanced. Once the implicit and explicit measures as well as follow-up questionnaires were completed, the participant was debriefed about the experiment and thanked for their participation.

## Results

### *Attitudes Towards Blacks*

It was predicted that participants primed to be collectivist would be more likely to attempt to tune to the experimenter’s views as compared to those primed to be individualistic. The experimenter’s views were demonstrated by means of either an egalitarian tshirt (i.e., for egalitarian views) or a plain tshirt (i.e., for no views). It was also predicted that those who perceived the experimenter to hold egalitarian views were more likely to demonstrate egalitarian attitudes towards Blacks, as opposed to those who perceived the experimenter to have no views, and were therefore more likely to be prejudiced towards Blacks. The data were analyzed using a 2 x 2 ANOVA with Perceived Views (egalitarian, no views) and

Mindset Prime (individualistic, collectivist) as factors. A total of 5 Black participants were excluded from this analysis in order to eliminate possible in-group bias.

*Explicit Attitudes.* As seen in Table 1, our predicted main effect for the explicit attitudes towards Blacks with respect to the Mindset Prime was not statistically significant,  $F(1, 89) = 0.11, p = 0.74$ . Those primed to be Collectivist ( $M = 0.20, SD = 0.98$ ) showed the same amount of explicit bias against Blacks than those primed to be Individualistic ( $M = 0.13, SD = 0.93$ ). Contrary to our hypothesis, the main effect for the Perceived Views was not statistically significant,  $F(1, 89) = 0.01, p = 0.91$ . Those who perceived the experimenter to be egalitarian ( $M = 0.15, SD = 1.04$ ) showed the same amount of prejudice compared those who perceived the experimenter to have no views ( $M = 0.18, SD = 0.87$ ). The interaction between Mindset Prime and Perceived Views was marginally statistically significant,  $F(1, 89) = 2.80, p = 0.09$ . To explore the interaction further, a simple effects analysis was conducted. Results from the simple effects analysis showed that none of the comparisons were statistically significant ( $p > 0.15$ ).

*Implicit Attitudes.* As seen in Table 1, the main effect for the implicit attitudes towards Blacks with respect to the Mindset Prime was not statistically significant,  $F(1, 91) = 0.49, p = 0.49$ . It was contrary to our hypothesis as those primed to be Collectivist ( $M = 0.54, SD = 0.37$ ) showed the same amount of implicit bias against Blacks than those primed to be Individualistic ( $M = 0.49, SD = 0.33$ ). Contrary to our hypothesis, the main effect for the Perceived Views was not statistically significant,  $F(1, 91) = 0.10, p = 0.76$ . Those who perceived the experimenter to be egalitarian ( $M = 0.51, SD = 0.34$ ) showed the same amount of prejudice compared to those who perceived the experimenter to have no views ( $M = 0.53, SD = 0.36$ ). The interaction between Mindset Prime and Perceived Views was not statistically significant,  $F(1, 91) = 0.28, p = 0.60$ .

### *Attitudes towards Homosexuals*

It was predicted that participants primed to be collectivist would be more likely to attempt to tune to the experimenter's views as compared to those primed to be individualistic. The experimenter's views were demonstrated by means of either an egalitarian tshirt (i.e., for egalitarian views) or a plain tshirt (i.e., for no views). It was also predicted that those who perceived the experimenter to hold egalitarian views were more likely to demonstrate egalitarian attitudes towards homosexuals, as opposed to those who perceived the experimenter to have no views, and were therefore more likely to be prejudiced towards homosexuals. The data were analyzed using a 2 X 2 ANOVA with Perceived Views (egalitarian, no views) and Mindset Prime (individualistic, collectivist) as factors. A total of 10 homosexual participants were excluded from this analysis in order to eliminate possible in-group bias.

*Explicit Attitudes.* As seen in Table 2, our predicted main effect for the explicit attitudes towards homosexuals with respect to the Mindset Prime was not statistically significant,  $F(1, 84) = 1.43, p = 0.23$ . Those primed to be Collectivist ( $M = 1.99, SD = 0.69$ ) showed the same amount of explicit bias against homosexuals than those primed to be Individualistic ( $M = 2.22, SD = 0.91$ ). Contrary to our hypothesis, the main effect for the Perceived Views was not statistically significant,  $F(1, 84) = 0.62, p = 0.43$ . Those who perceived the experimenter to be egalitarian ( $M = 2.04, SD = 0.65$ ) showed the same amount of prejudice compared to those who perceived the experimenter to have no views ( $M = 2.16, SD = 0.93$ ). The interaction between Mindset Prime and Perceived Views was marginally statistically significant,  $F(1, 84) = 3.12, p = 0.08$ . A simple effects analysis showed that, contrary to our hypothesis, those participants who perceived the experimenter be egalitarian and were primed to be individualistic ( $M = 1.99, SD = 0.18$ ) tuned more by indicating less explicit prejudice towards homosexuals than those who were primed to be collectivist ( $M =$

2.08,  $SD = 0.17$ ). Those participants who perceived the experimenter to have no views and were primed to be individualistic ( $M = 2.42$ ,  $SD = 0.17$ ) displayed more explicit prejudice towards homosexuals than those who were primed to be collectivist ( $M = 1.92$ ,  $SD = 0.16$ ),  $F(1, 84) = 4.62$ ,  $p = 0.03$ . The analysis also showed that those participants who were primed to be individualistic and perceived the experimenter to have no views ( $M = 2.42$ ,  $SD = 0.17$ ) showed more explicit bias towards homosexuals than those who were primed to be individualistic but perceived the experimenter to be egalitarian ( $M = 1.99$ ,  $SD = 0.18$ ). Contrary to our expectations, those participants who were primed to be collectivist and perceived the experimenter to have no views ( $M = 1.92$ ,  $SD = 0.18$ ), showed less explicit bias towards homosexuals than those who were primed to be collectivist but perceived the experimenter to be egalitarian ( $M = 2.08$ ,  $SD = 0.17$ ),  $F(1, 84) = 3.05$ ,  $p = 0.08$ .

*Implicit Attitudes.* As seen in Table 2, the main effect for the implicit attitudes towards homosexuals with respect to the Mindset Prime was not statistically significant,  $F(1, 86) = 0.19$ ,  $p = 0.66$ . Those primed to be Collectivist ( $M = 0.37$ ,  $SD = 0.35$ ) showed the same amount of implicit bias against homosexuals than those primed to be Individualistic ( $M = 0.34$ ,  $SD = 0.37$ ). The main effect for Perceived Views was statistically significant,  $F(1, 86) = 6.60$ ,  $p = 0.01$ . Those who perceived the experimenter to be egalitarian ( $M = 0.26$ ,  $SD = 0.34$ ) were less prejudiced than those who perceived the experimenter to have no views ( $M = 0.45$ ,  $SD = 0.34$ ). Contrary to our predictions, the interaction between Mindset Prime and Perceived Views was not statistically significant,  $F(1, 86) = 0.13$ ,  $p = 0.72$ .

*Questionnaire responses.*

The questionnaire was provided to the participants in order to determine the extent to which participants felt the desire to get along or align their views with the experimenter. Over two-thirds of the participants responded neutrally or mildly favorably when asked to what



extent they would like to get along with the experimenter (55 participants out of 100 valid responses). An overwhelming majority (83 participants) responded either neutrally or negatively when asked as to what extent they tried to see the world through the experimenter's eyes. Similarly, a majority of participants (86 participants) responded either neutrally or negatively when asked about how much they thought about the experimenter's beliefs on prejudice and discrimination while completing the IAT with a majority responding negatively (>53 participants). When participants were asked as to how much they tried to respond in a manner that the experimenter would like them to when completing the explicit attitudes questionnaire, 88 participants responded either neutrally or negatively, with a majority responding negatively (>48 participants). A two-way ANOVA analysis showed that these responses did not vary across the different conditions ( $p > 0.12$ ).

## Discussion

The objective of this experiment was to test whether collectivist mindsets are more likely to align their views with their interaction partners as compared to individualistic mindsets, in order to maintain group harmony (Oyserman et al, 2009). From the results of this experiment, however, it was observed that participants primed to be collectivist were more likely to exhibit prejudiced attitudes despite apparently perceiving the experimenter to be egalitarian, therefore not tuning or aligning their views with the experimenter. Also contradictory to results from past research, participants primed to be individualistic were more likely to tune and exhibit egalitarian attitudes. In this regard, the experiment conducted did not support the original hypothesis.

A possible explanation for the observed results in this experiment could be that participants may have assumed that a greater majority of people possess racial and sexual orientation bias. There is substantial evidence to suggest that recurrent exposure to stimuli

aids in developing attitudes towards those stimuli (Zajonc, 1968). Therefore, with the vast amount of exposure to media and so forth on the presence of subtle as well as evident prejudiced attitudes, it is possible for individuals to come to expect that prejudiced attitudes are a commonplace in today's world. Specifically, it has been found that approximately two thirds of the White American population believes that African Americans are inferior in their work status, housing, etc. as compared to whites due to their "lack of motivation to do better" (Mackie, Hamilton, Susskind & Rosselli, 1996, pp. 60). Research shows that significant social groups can operate as reference points in the development of our own attitudes (Ledgerwood & Chaiken, 2007). Therefore, those primed to be collectivist may have felt more inclined to conform to these prejudiced attitudes that most people are expected to have towards Blacks and homosexuals, and hence demonstrated prejudiced views towards the same. Those primed to be individualistic, however, may have perceived the prejudiced stance that this large population appears to have about Blacks and homosexuals, and attempted to distinguish themselves from a similar pattern of thinking, therefore appearing more egalitarian.

These results may be attributed to the participants' desire to appear unique from other members of their group. This behavior of attempting to appear distinct is known as "antituning" (Sinclair et al, 2005). In the case of the current experiment, participants, who were all students, may have felt a desire to separate themselves from other students by attempting to appear different in their views towards Blacks and homosexuals. Additionally, another explanation for the recorded behavior could be the existence of pluralistic ignorance in the minds of those primed collectivist. Pluralistic ignorance is the phenomenon in which individuals' private attitudes and opinions are different from others', yet they behave in a way indistinguishable from others (Prentice & Miller, 1993). Therefore, participants primed to be collectivist may have been egalitarian to begin with, but their actions were in

accordance with the incorrectly assumed social norm which was to show bias towards Blacks and homosexuals.

This explanation is further supported by the argument that use of primes may promote polarization, i.e., agreement with ingroup and disagreement with outgroup (Ledgerwood & Chaiken, 2007). Therefore, those primed collectivist may have acted in agreement with their ingroup, which would be the perceived large population holding biased views towards Blacks and homosexuals. Similarly, those primed to be individualistic may have acted in agreement with their ingroup, which would be the perceived minority population that held egalitarian views towards Blacks and homosexuals.

Given this possibility, it is probable that those participants primed to be individualistic are more committed towards appearing egalitarian. Past research suggests that commitment to egalitarian goals can result in preconscious control of activation of stereotypes (Moksowitz, Gollwitzer, Wasel & Schaal, 1999). Essentially, it is possible that the individualistic mindset caused participants to be more driven to appear egalitarian, resulting in greater control towards stereotype activation. This greater control would thus lead to more egalitarian attitudes.

Another potential factor that could skew results could be the race of the experimenters themselves. In the case of an experimenter from a minority group, it is possible that participants assumed that the experimenter was egalitarian, regardless of the tshirt (perceived views) depicting egalitarian or no views. Those who perceived the experimenter to have no views may have assumed the experimenter to possess egalitarian attitudes because of their minority status, while those who perceived the experimenter to be egalitarian (i.e., when the experimenter was wearing an egalitarian tshirt) may have assumed that the experimenter was promoting egalitarian behavior due to their racial disposition. This assumption that the

experimenter was egalitarian may have caused participants to default to their own attitudes rather than attempt to align their views with the experimenter, who may have appeared to be egalitarian regardless.

One of the possible reasons for this motivation to conform or contradict with the views of the general population instead of conforming or contradicting with the views of only the experimenter could be due to lack of interaction with the experimenter. In the questionnaire that followed the IAT's, several participants indicated that there was not substantial interaction with the experimenter that could allow them to infer the views the experimenter held. Additionally, on average, most participants did not actively feel as though the experimenter's views affected their own as much, neither did they feel themselves try or want to align their views to the those of the experimenter's. Since mutual understanding and communication is imperative in order for the participant to "share reality" with the experimenter (Hardin & Higgins, 1996) resulting in possible alignment of views with the latter, minimal interaction could cause the participants to default to their own views rather than attempting to align them with those of the experimenter.

Considering this aspect of minimal interaction with the experimenter, it is also possible that epistemic and affiliative motivations may have played a role in the participants' responses. In the case of epistemic motivation, individuals tend to gauge their responses and interactions with respect to their interaction partners (Boyle, 1993). Affiliative motivation is the desire that individuals have that drives them to "affiliate" or try to get along with their interaction partner (Sinclair et al, 2005). However, in the case of this experiment, with participants having little communication with the experimenter, it was quite possible that the participants were not able to estimate the experimenter's stance, nor were they given any incentive to feel a desire to affiliate with them. Nonetheless, epistemic and affiliative motivations were neither considered nor included in this experiment, which may have given

rise to certain grey areas with respect to the extent to which participants chose to align their views with the experimenter.

Keeping these arguments in mind, there are vast ranges of future adaptations of the current research that may help investigate further upon social tuning across cultures. Future research could take into account the issue of the lack of interaction between the participants and the experimenter. Additionally, the race of the experimenter could be chosen such that the experimenter(s) involved represent a majority group. As a precautionary measure, the number of experimenters could be kept to a minimum such that there are lesser possibilities of existing relationships between the experimenter and participants which could affect the data set and results adversely.

Another aspect that may be considered is the effect of the mindset prime over a longer period of time. Past research suggests that mindset primes generally tend to last up to or begin to show their presence after about a week in duration (Weisbuch, Sinclair, Skorinko & Eccleston, 2009). Therefore, following up with participants a certain period after completion of the experiment may present data that could show whether or not the prime affected their behavior later on.

The perceived views could also be expressed in a manner less subtle. Most participants stated that the tshirt wasn't anything out of the ordinary, and therefore may not have followed the point of the experimenter wearing it. Therefore, a more obvious representation of the experimenter's views could potentially aid in perception as well as alignment of views by the participants.

Finally, it is very likely that affiliative and epistemic motivations may have played a role in the tuning process for the participants. However, since neither of these motivations

was manipulated in this study, future research should consider manipulating the mindsets along with one of these motivations, which may produce more conclusive results.

In conclusion, despite the mentioned limitations, the current research showed that individuals primed to be individualistic will tune towards the perceived views of their interaction partner more so than those primed to be collectivist. Thus, this study poses possible explanations for the different behaviors recorded in the course of the study, and suggests a number of factors to be considered in future research. By examining these research questions further, future research will provide a deeper understanding of the complexities associated with the interaction of individuals with one another, the motivations and expectations behind each interaction itself as well as the influence that culture may have on the very nature of the resulting relationships.

## References

- Adler, N. J., Brahm, R., & Graham, J. L. (1991). Strategy implementation: A comparison of face-to-face negotiation. *Strategic Management Journal*, 13(6), 449-466.
- Boyle, R. A. (1993). Epistemic motivation and conceptual change. , 1-23.
- English, T., & Chen, S. (2007). Culture and self-concept stability: Consistency across and within contexts among asian americans and european americans. *Journal of Personality and Social Psychology*, 93(3), 478-490.
- Greenwald, A. G., Banaji, M. R. & Nosek, B. A. (2005). Understanding and using the Implicit Association Test: II. Method variables and construct validity. *Personality and Social Psychology Bulletin*, 31(2), 166–180
- Hardin, C. D., & Higgins, T. E. (1996). Shared reality: How social verification makes the subjective objective. *Handbook of Motivation and Cognition*, 3, 28-84.
- Herek, G. M. (1988). Heterosexuals' attitudes towards lesbians and gay men: Correlates and gender differences. *The Journal of Sex Research*, 25(4), 451-477.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.) Sage Publications.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35(2), 286-316.
- Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. *Psychological Bulletin*, 89(1), 47-62.

- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology, 55*(6), 893-905.
- Kim, H., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology, 77*(4), 785-800.
- Kitayama, S., & Markus, H. R. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*(2), 224-253.
- Ledgerwood, A., & Chaiken, S. (2007). Priming us and them: Automatic assimilation and contrast in group attitudes. *Journal of Personality and Social Psychology, 93*(6), 940-956.
- Lun, J., Sinclair, S., Whitchurch, E. R., & Glenn, C. (2007). (Why) Do I think what you think? Epistemic social tuning and implicit prejudice. *Journal of Personality and Social Psychology, 93*(6), 957-972.
- Mackie, D. M., Hamilton, D. L., Susskind, J., & Rosselli, F. (1996). Social psychological foundations of stereotype formation. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping*, 41-78. New York: Guilford.
- Moskowitz, G. B., Gollwitzer, P. M., Wasel, W., & Schaal, B. (1999). Preconscious control of stereotype activation through chronic egalitarian goals. *Journal of Personality and Social Psychology, 77*(1), 167-184.
- Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2006). Website:  
<http://implicit.harvard.edu/>.



- Oyserman, D., Sorenson, N., Reber, R., & Chen, S. X. (2009). Connecting and separating mindsets: Culture as situated cognition. *Journal of Personality and Social Psychology, 97*(2), 217-235.
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology, 64*(2), 243-256.
- Sinclair, S., Huntsinger, J., Skorinko, J., & Hardin, C. D. (2005). Social tuning of the self: Consequences for the self-evaluations of stereotype targets. *Journal of Personality and Social Psychology, 89*(2), 160-175.
- Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology, 89*(4), 583-592.
- Sivadas, E., Bruvold, N. T., & Nelson, M. R. (2008). A reduced version of the horizontal and vertical individualism and collectivism scale: A four-country assessment. *Journal of Business Research, 61*, 201-210.
- Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology, 54*(2), 323-338.
- Weisbuch, M., Sinclair, S. A., Skorinko, J. L., & Eccleston, C. (2009). Self-esteem depends on the beholder: Effects of a subtle social value cue. *Journal of Experimental Social Psychology, 45*, 143-148.
- Zajonc, R. B. (1968) Attitudinal effects of mere exposure, *Journal of Personality and Social Psychology, 9*, Monograph supplement No. 2, Part 2.

## Appendix A

### Script for Cross-Cultural and Social Tuning

#### I. Log Sheet

- a. Keep a log of the participant's that we have run. Mark the date, the participant's first name, your name, and the time of the session. *Also make sure you have indicate what Tshirt you are wearing (Egalitarian or Plain and for the Prime (A or B)).*
- b. *The login sheet will tell you which computer program you are running (crosscultural.exp or crosscultural2.exp).*
- c. *If you run more than 2 participants at a time, be sure to run them all with the same tshirt--just adjust the log sheet accordingly.*

#### II. Put On a TSHIRT

- a. Check the log sheet to see if you should wear the Plain Shirt or the Egalitarian Shirt
- b. It is located in filing cabinet drawer marked "A8"

#### III. Set up Computer Tasks

- a. Before the participant comes into the room, set up each computer with the Inquisit program.
- b. Check the script to figure out which file to open (either "crosscltural.exp" or "crosscultural2.exp").
- c. Directions are at the **end** of the script
- d. **\*\*\*Be sure to seat the participant at the computer you assigned them to**

#### IV. Introduction & Informed Consent

- a. "My name is \_\_\_\_\_ and I am going to be your experimenter today. To make sure that all participants receive the same information, I will be reading from this script. Thank you for participating in this experiment. Today you will be completing a written task, followed by a computer task. These tasks will be used in order to study cognitive skills. Before we begin, I am going to give you an informed consent agreement for this experiment. Please read it over and sign it. Let me know if you have any question and if you would like to have a copy of the consent form."
- b. Collect Informed Consents and put them in "SIGNED CONSENTS" Folder.

#### V. Visual Test:

*T-shirt condition:*

"Before starting the experiment, I need to test your vision. Can you see the writing on my shirt here? [Stand at 1<sup>st</sup> mark] What about here? [2<sup>nd</sup> mark] What about here? [3<sup>rd</sup> mark]?"

- a. You should consider searching the room for an eye chart and then suggest your shirt, or you can just tell them something like *"I realized when I got here to set up that I forgot to bring the eye chart with me, and I need to test your vision. So, we are going to have to make-do and use them letters on my shirt."*

*Control condition:*

“Before starting the experiment, I need to test your vision. Can you see the writing on the paper here? [Stand at 1<sup>st</sup> mark] What about here? [2<sup>nd</sup> mark] What about here? [3<sup>rd</sup> mark]?”

**VI. Written task:**

“For this task you will be given two small excerpts, and you are required to circle all the pronouns. You may return the sheet to me once you have completed the task.”

- i. Make sure you put the Participant’s Number at the top of the sheet—or we won’t know who they are.
- ii. The sheets are randomized. So just take from the top and indicate on the login sheet whether it was “A” or “B”.

**VII. IAT:**

“Now, we would like you to complete a computer task. In this task, you’ll see two category labels on the top of the screen. Your job is to categorize pictures or words that appear on the screen below these labels into the two categories. Press the “D” key if the picture or word belongs to the category on the left hand side and “K” key if the picture or word belongs to the right hand side category. It’s important that you go as quickly and accurately as possible.”

- a. Note: Check the login sheet to see which file to open—either `crosscultural.exp` or `crosscultural2.exp`
  - i. The files are the same except it counterbalances which IAT comes first.

**VIII. Questionnaire:**

- a. The computer automatically leads them into here, so you may not need to say anything.

**IX. Debriefing:**

- a. **Wait until everyone has finished before debriefing.**
- b. **The computer will automatically exit out of the program after they complete the questionnaire.**
- c. “In this experiment, we are interested in investigating if culture and perceptions of the experimenter’s views led to social tuning (or aligning your views with the experimenter). To do so, we manipulated whether you were in an individualistic (or self-oriented) or collectivist (or group-oriented) mindset. This was done in the pronoun-circling task—you either circled singular pronouns (e.g., I) or plural pronouns (e.g., we). We also manipulated the views you thought your experimenter had by having the experimenter wear either a plain tshirt (no views) or a shirt with a positive and egalitarian message on it. We measured your implicit and explicit attitudes towards

different groups. We predict that those in a collectivist mindset (or group-focused) will be more likely to tune than those in an individualistic mindset (or self-focused). Do you have any questions? Since this research is on-going, we have to ask that you keep the details quiet. So, please do not talk about the purpose or details of the study with your friends, classmates, or other participants that you meet at other studies—as they all might participate in this study in the future. Thank you for your participation! We really appreciate it! Have a great day.

**d. If they ask about the IAT:**

“The computer task is called the implicit association task. We asked you to categorize positive or negative words simultaneously pictures of people in different ethnic or sexual orientation groups. The idea is that if people have a preference toward a social category, they may find it easier to do the task if that category is paired with positive words than negative words. If you’re interested to know more about these computer tasks, we encourage you to visit the website called project implicit. We want you to know that these results may not suggest that people are prejudice towards certain members of social group. Afterwards, we asked you to complete the questionnaire that measured attitudes about self and others that you consciously endorsed.”

**1) Pack Up**

- a. Make sure the participant number is on all materials (Prime).**
- b. Make sure you entered the information on the login sheet**
- c. Make sure that you matched the participant with the correct computer.**
- d. Make sure everything is cleaned up.

**COMPUTER TASK SET UP INSTRUCTIONS:**

- 1) Open the “A8” folder on the desktop
  - a. Check the login sheet to see which Program you are running—“crosscultural.exp” or “crosscultural2.exp”.
  - b. Double click the file you want to run e.g., “crosscultural.exp”
  - c. Enter the Participants Number you assigned them, in the box that asked for the Subjects ID.
  - d. Click RUN.
  - e. The data will be collected in several files (called “explicit.dat”) in the A8 Folder.

Appendix B

*Image of Egalitarian Tshirt*



## Appendix C

### *Explicit Attitudes Questionnaire*

*Attitudes towards Blacks: (Scale: 1 = Strongly Disagree, 5 = Strongly Agree)*

1. It's surprising that Black people do as well as they do, considering all the obstacles they face.
2. Too many Blacks still lose out on jobs and promotions because of their skin color.
3. Most Blacks are no longer discriminated against.
4. Blacks have more to offer than they have been allowed to show.
5. Sometimes Black job seekers should be given special consideration in hiring.
6. Many Whites show a real lack of understanding of the problems that Blacks face.
7. Most Blacks have the drive and determination to get ahead.
8. The root cause of the social and economic ills of Blacks is the weakness and instability of the Black family.
9. On the whole, Black people don't stress education and training.
10. Many Black teenagers don't respect themselves or anyone else.
11. Blacks don't seem to use opportunities to own and operate little shops and businesses.
12. Black children would do better in school if their parents had better attitudes about learning.
13. Blacks should take the jobs that are available and then work their way up to better jobs.
14. One of the biggest problems for a lot of Blacks is their lack of self-respect.

*Attitudes towards homosexuals (Scale: 1 = Strongly Disagree, 5 = Strongly Agree)*

1. Lesbians can't fit into our society.
2. A woman's homosexuality should not be a cause for job discrimination.
3. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.
4. Female homosexuality is morally unacceptable.
5. The growing number of lesbians indicates a decline in morals.
6. Female homosexuality in itself is no problem, but what society makes of it can be a problem.
7. Lesbians are sick.
8. Homosexual couples should be allowed to adopt children the same as heterosexual couples.
9. I think male homosexuals are disgusting.
10. Male homosexuals should not be allowed to teach school.
11. Male homosexuality is a perversion.
12. Just as in other species, male homosexuality is a natural expression of sexuality in human men.
13. If a man has homosexual feelings, he should do everything he can to overcome them.
14. I would not be too upset if I learned that my son were a homosexual.
15. Homosexual behavior between two men is just plain wrong.
16. Homosexuality is merely a different kind of life-style that should not be condemned.

## Appendix D

### *Group Harmony Questionnaire (Scale: 1 = Not at all, 7 = Very Much)*

1. I have respect for the authority figures with whom I interact.
2. It is important to me to maintain harmony within my group.
3. My happiness depends on the happiness of those around me.
4. I would offer my seat in a bus to my professor.
5. I respect people who are modest about themselves.
6. I will sacrifice my self-interest for the benefit of the group I am in.
7. I often have the feeling that my relationships with others are more important than my own accomplishments.
8. I should take into consideration my parents' advice when making education/career plans.
9. It is important to me to respect decisions made by the group.
10. I will stay in a group if they need me, even when I'm not happy with the group.
11. If my brother or sister fails, I feel responsible.
12. Even when I strongly disagree with group members, I avoid an argument.
13. I'd rather say No directly, than risk being misunderstood.
14. Speaking up during class is not a problem for me.
15. Having a lively imagination is important to me.
16. I am comfortable with being singled out for praise or rewards.
17. I am the same person at home that I am at school.
18. Being able to take care of myself is a primary concern for me.
19. I act the same way no matter who I am with.
20. I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am.
21. I prefer to be direct and forthright when dealing with people I've just met.
22. I enjoy being unique and different from others in many respects.
23. My personal identity independent of others is very important to me.
24. I value being in good health above everything.

### *Affiliation with Experimenter (Scale: 1 = Not at all, 7 = Very Much)*

1. How much do you like your experimenter?
2. How much do you want to get along with the experimenter?
3. To what extent do you feel that you and the experimenter have things in common?
4. How much do you want the experimenter to like you?
5. How much did you try to see the world through the experimenter's eyes (or point of view)?
6. How easy was it to try to put yourself in the position of the experimenter?
7. How does your experimenter think YOU feel about Blacks?
8. How does your experimenter think YOU feel about homosexuals?
9. How much does the experimenter want to change your feelings towards Blacks?

10. How much does the experimenter want to change your feelings towards homosexuals?
11. When completing the picture and word sorting tasks, how much do you feel like you were purposely trying to respond in a manner that the experimenter would like?
12. When completing the picture and word sorting tasks, how hard did you try to respond in a non-prejudiced way?
13. When completing the picture and word sorting tasks, how much did you think about the experimenter's beliefs about prejudice/discrimination?
14. How important was it to YOU that your responses on the picture and word sorting tasks reflected the experimenter's beliefs about the importance of avoiding prejudice?
15. How important was it to the EXPERIMENTER that your responses during the picture and word sorting tasks reflected his/her beliefs about avoiding prejudice?
16. How likely is it that your responses during the picture and word sorting tasks reflected the experimenter's beliefs about avoiding prejudice?
17. When completing the questionnaires (after the picture and word sorting tasks), how much do you feel like you were purposely trying to respond in a manner that the experimenter would like?
18. When completing the questionnaires (after the picture and word sorting tasks), how hard did you try to respond in a non-prejudiced way?
19. When completing the questionnaires (after the picture and word sorting tasks), how often did you think about the experimenter's beliefs about prejudice?
20. How important was it to YOU that your responses on the questionnaires reflected the experimenter's beliefs about the importance of avoiding prejudice?
21. How important was it to the EXPERIMENTER that your responses during the questionnaires reflected his/her beliefs about avoiding prejudice?
22. How likely is it that your responses during the questionnaires (after the picture and word sorting tasks) reflected the experimenter's beliefs about avoiding prejudice?

#### *Demographic Information*

1. Gender: *Male, Female*
2. Ethnicity: *Black, Asian, White, Latino, Biracial, Other*
3. Sexual orientation: *Heterosexual, Homosexual, Bisexual, Prefer not to answer*
4. Year in school: *First, Second, Third, Fourth, Graduate Student, Not in school*
5. Native language: *English, Cantonese, Mandarin, Other*
6. Where were you born: *Hong Kong, Mainland China, US, Europe, South East Asia, Other*

#### *Validity Check (Scale: 1 = Not at all, 7 = Very Much)*

1. Before being asked this question, had you noticed any message on the experiment's tshirt?
2. If yes, what was the message?
3. In some of the trials, the experimenter wore a tshirt that said--People don't discriminate. They learn it--What does this message mean to you?



4. How persuasive do think the--People don't discriminate, they learn it-- message is?
5. If given the opportunity, to what extent would you wear a tshirt with the message--People don't discriminate, they learn it?
6. As you were participating in the experiment, to what extent did you think about why the experimenter was wearing the t-shirt they were wearing?

## Table Captions

*Table 1: Attitudes towards Blacks*

*Table 2: Attitudes towards homosexuals*

## Figure Captions

*Figure 1: Mean Explicit Prejudice towards Blacks*

*Figure 2: Mean Explicit Prejudice towards Homosexuals*

*Figure 3: Mean Main Effect for Perceived Views for Implicit Attitudes towards Homosexuals*

## Analyses Tables

Table 1:

Independent Variables	N	Mean	Standard Deviation	F	<i>p</i>
<i>Explicit Attitudes towards Blacks</i>					
Mindset Prime				0.11	0.74
Individualistic	46	0.13	0.93		
Collectivist	47	0.20	0.98		
Perceived Views				0.01	0.91
Plain	48	0.18	0.87		
Egalitarian	45	0.15	1.04		
Mindset Prime x Perceived Views				2.80	0.09
Indv. x Plain	24	-0.02	0.79		
Indv. x Egal.	22	0.29	1.05		
Coll. x Plain	24	0.38	0.93		
Coll. x Egal.	23	0.02	1.04		
<i>Implicit Attitudes towards Blacks</i>					
Mindset Prime				0.49	0.49
Individualistic	47	0.49	0.33		
Collectivist	48	0.54	0.37		
Perceived Views				0.10	0.76
Plain	48	0.53	0.36		
Egalitarian	47	0.51	0.34		
Mindset Prime x Perceived Views				0.28	0.60
Indv. x Plain	24	0.53	0.35		
Indv. x Egal.	23	0.46	0.32		
Coll. x Plain	24	0.54	0.38		
Coll. x Egal.	24	0.55	0.36		

Table 2:

<b>Independent Variables</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>F</b>	<b>p</b>
<i>Explicit Attitudes towards homosexuals</i>					
Mindset Prime				1.43	0.23
Individualistic	41	2.22	0.91		
Collectivist	47	1.99	0.69		
Perceived Views				0.62	0.43
Plain	46	2.16	0.93		
Egalitarian	42	2.04	0.66		
Mindset Prime x Perceived Views				3.12	0.08
Indv. x Plain	22	2.42	1.08		
Indv. x Egal.	19	1.98	0.63		
Coll. x Plain	24	1.92	0.71		
Coll. x Egal.	23	2.08	0.68		
<i>Implicit Attitudes towards homosexuals</i>					
Mindset Prime				0.19	0.66
Individualistic	42	0.34	0.37		
Collectivist	48	0.37	0.35		
Perceived Views				6.60	0.01
Plain	46	0.45	0.34		
Egalitarian	44	0.26	0.34		
Mindset Prime x Perceived Views				0.13	0.72
Indv. x Plain	22	0.44	0.32		
Indv. x Egal.	20	0.23	0.39		
Coll. x Plain	24	0.45	0.37		
Coll. x Egal.	24	0.29	0.30		

## Analyses Figures

Figure 1:

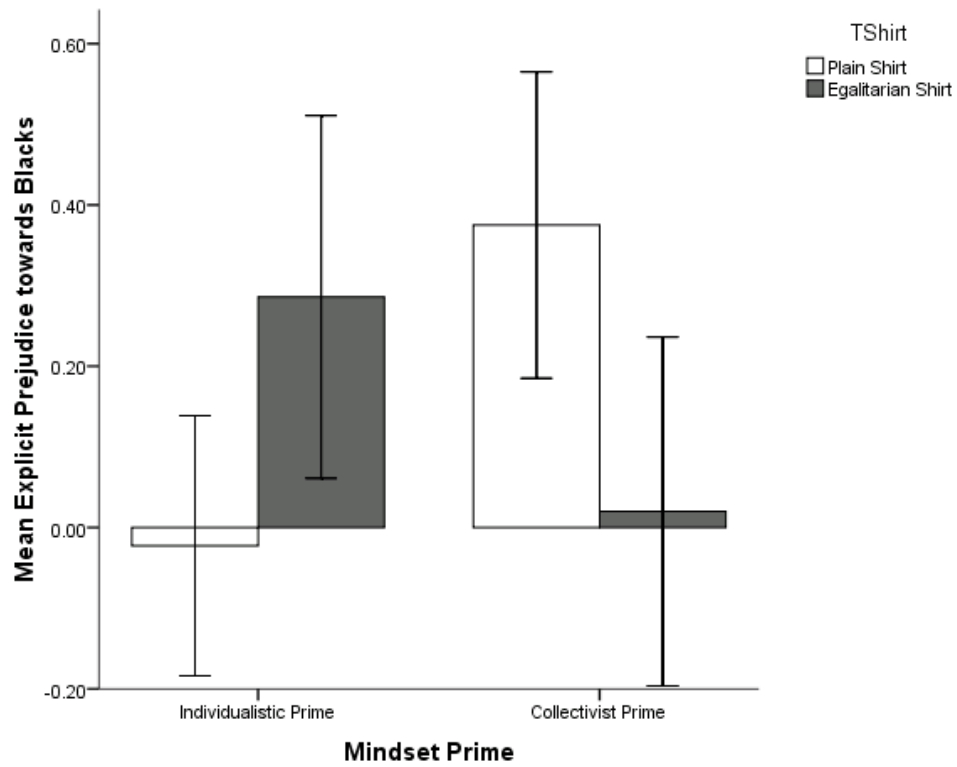


Figure 2:

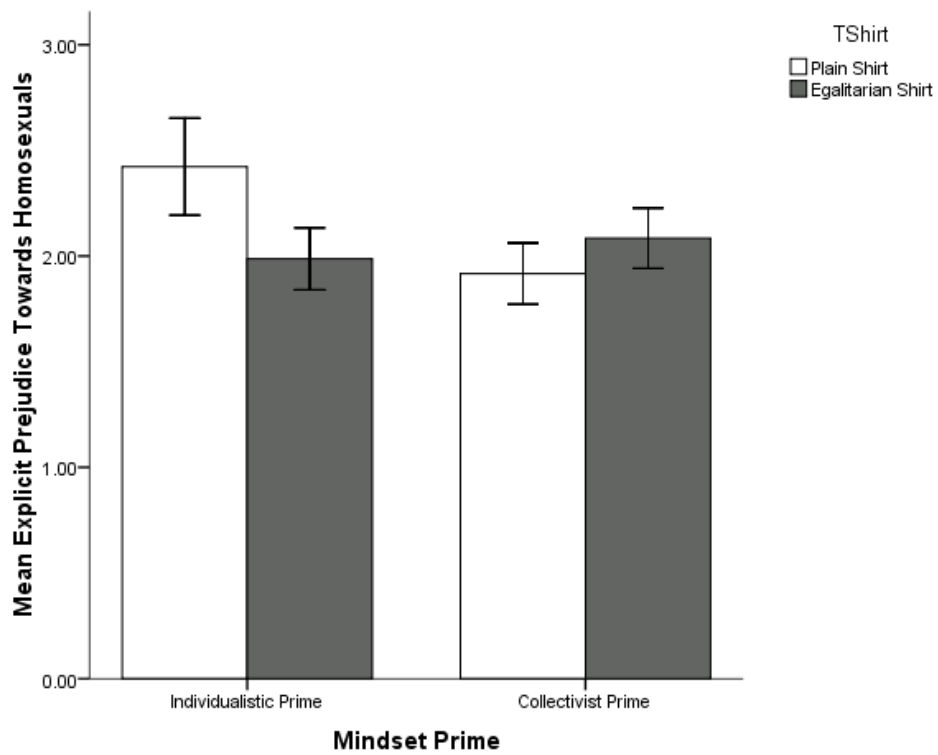


Figure 3:

